



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,267	09/26/2003	Robert A. Blakley	87326.3203	4932

7590 08/10/2007
BAKER & HOSTETLER LLP
Washington Square
Suite 1100
1050 Connecticut Avenue, N.W.
WASHINGTON, DC 20036

EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
----------	--------------

1723

MAIL DATE	DELIVERY MODE
-----------	---------------

08/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/670,267	Applicant(s) BLAKLEY ET AL.	
	Examiner David L. Sorkin	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 28, 30, 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims depend from a canceled claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26-31 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollerith (US 1,898,628). Regarding claims 26, 27, 35 and 36, Hollerith ('628) discloses an apparatus comprising a longitudinal drive shaft (7); a drive disc (14') affixed to the drive shaft and provided as a flange extending radially outward from the drive shaft and having a circular periphery with a diameter greater than the diameter of the drive shaft, and having top and bottom flange surfaces, wherein the drive disc has a plurality of first mounting holes (23) extending from the top disc surface to the bottom disc surface through the disc; at least one first blade pair member (16, 17, 18,

Art Unit: 1723

19, 20) having a central mounting portion and two or more impeller blades (16, 18 and 17, 19) extending radially outwardly from the central mounting portion, wherein the mounting portion has a plurality of second mounting holes (22) each extending completely through the mounting portion in a circular pattern (page 1, lines 78-79), and arranged in the same pattern as the first mounting holes; and a plurality of bolts (24) each extending through respective ones of the first and second holes, to affix the mounting portion of the impeller to the drive disc. Hollerith ('628) does not use the word "permanently" to characterize the manner in which the drive shaft is affixed to the shaft. However, it is stated that the flange is secured "by a pin, or by any other means" (page 1, lines 56-57) and it is recognized that being "welded" is an alternative manner in which a part may be secured (page 1, lines 61-62). Regarding claims 28-31 and 37-40, the mounting portion has a central hole (21) therethrough. The drive disc is located near, but not exactly at, the end of the drive shaft, and is therefore at an intermediate length along the longitudinal length of the drive shaft. It would have been obvious to one of ordinary skill in the art to have selected the degree, if any, to which the shaft may slightly extend past the drive disc.

5. Claims 32-34 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollerith (US 1,898,628) in view of Ford (US 1,372,414). The apparatus of Hollerith ('628) was discussed above. Hollerith ('628) does not disclose a second blade pair member. Ford ('414) discloses attaching substantially identical blade pair members to a disc using bolts which extend through the disc, and blade pair members (see page 1, lines 68-85). Henry Ford explains that this technique results in

Art Unit: 1723

inexpensive manufacture, "great rigidity, a saving of material and consequently minimum weight" (page 1, lines 95-105); therefor it would have been obvious to one of ordinary skill in the art to have implemented Henry Ford's technique to realize one or more of these advantages. See also *In re Harza*, 124 USPQ 378 (CCPA 1960) and *St. Regis Paper Co. v. Bemis Co.* 193 USPQ 8, 11 (7th Cir. 1977) regarding the obviousness of duplicating parts.

Response to Arguments

6. Applicant's arguments are moot in view of the new grounds of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

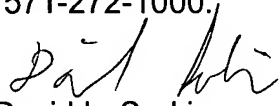
Art Unit: 1723

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 7:30-4:00 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David L. Sorkin
Primary Examiner
Art Unit 1723

DLS